

Before the
Federal Communications Commission
Washington, DC 20554

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FEDERAL COMMUNICATIONS COMMISSION
OFFICE OF THE SECRETARY

In the Matter of

Availability of INTELSAT Space Segment
Capacity to Users and Providers Seeking to
Access INTELSAT Directly

IB Docket No. 00-91

To: The Commission

COMMENTS OF SPRINT COMMUNICATIONS COMPANY L.P.
AND WORLDCOM, INC.

Sprint Communications Company L.P. ("Sprint") and WorldCom, Inc. ("WorldCom") (formerly MCI WorldCom, Inc.) hereby submit comments in response to the Commission's Portability NPRM.¹ In the Open-Market Reorganization for the Betterment of International Telecommunications Act ("ORBIT Act"),² Congress instructed the Commission to initiate this proceeding "to determine if users or providers of telecommunications services have sufficient opportunity to access INTELSAT space segment capacity directly from INTELSAT to meet their service or capacity requirements."³ As shown below, access to such capacity is manifestly insufficient. Therefore, the Commission should require COMSAT Corporation ("COMSAT") to make INTELSAT capacity available upon payment to COMSAT of a reasonable network

¹ Availability of INTELSAT Space Segment Capacity to Users and Service Providers Seeking to Access INTELSAT Directly, FCC 00-186, IB Docket No. 00-91 (rel. May 24, 2000) ("Portability NPRM").

² Pub. L. 106-180, 114 Stat. 48 (2000).

³ 47 U.S.C. § 765(b) (as added by § 3 of ORBIT Act) (emphasis added).

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management fee, and should require COMSAT to take other actions, as set forth below, that will promote the Commission's and Congress's policy of direct access to INTELSAT.

I. Introduction and Summary

This proceeding is the latest step in the efforts of the Commission and Congress to ensure non-discriminatory access to the facilities of INTELSAT – which provide a unique resource for global connectivity for which there is no viable substitute in many circumstances.

Nearly 40 years ago, in the Communications Satellite Act of 1962 (the “Satellite Act”), Congress provided for U.S. participation in INTELSAT – with a leading role for COMSAT as the only U.S. Signatory to INTELSAT.⁴ At the same time, Congress mandated nondiscriminatory access to the services of INTELSAT.⁵ In 1984, the Commission considered and rejected “direct access” to INTELSAT – *i.e.*, direct purchases of INTELSAT services by U.S. companies other than COMSAT.⁶ However, last year in the Direct Access Order, the Commission concluded that the nondiscrimination obligations of the Satellite Act and developments in the international satellite industry required implementation of direct access.⁷

⁴ See Communications Satellite Act of 1962, Pub. L. 87-624, 76 Stat. 419 (1962).

⁵ See 47 U.S.C. § 701(c) (“It is the intent of Congress that all authorized users have nondiscriminatory access to [INTELSAT] ...”), § 721(c)(2) (requiring the Commission to “insure that all present and future authorized carriers shall have nondiscriminatory use of, and equitable access to, [INTELSAT]”).

⁶ See Regulatory Policies Concerning Direct Access to the INTELSAT Space Segment for U.S. International Service Carriers, 97 F.C.C.2d 296 (1984) (“1984 Direct Access Order”), *aff'd*, Western Union International v. FCC, 804 F.2d 1280 (D.C. Cir. 1986).

⁷ Direct Access to the INTELSAT System, FCC 99-236, IB Docket No. 98-192 (rel. Sept. 16, 1999) (“Direct Access Order”).

Most recently, in the ORBIT Act, Congress took steps to encourage the privatization of INTELSAT in order “to promote a fully competitive market for satellite communications services for the benefit of consumers and providers of satellite services and equipment.”⁸ Congress also mandated direct access to INTELSAT.⁹

During the period since December 1999, when the Direct Access Order became effective, it has become readily apparent that most of the benefits of direct access will not be realized without further Commission action. This should not be surprising in view of the fact that COMSAT was the sole U.S. gateway to INTELSAT for almost forty years. The Commission should not underestimate the practical difficulties inherent in ousting COMSAT from its middleman role. Declaring the legality of direct access did not make it a reality; rather, it was only a first step.

The experience of Sprint and WorldCom, as well as facts already on the record in the Direct Access Order, clearly show that U.S. carriers do not have sufficient opportunity to access INTELSAT capacity directly. Reservations of INTELSAT capacity by COMSAT and related COMSAT conduct have severely limited the direct availability of INTELSAT capacity to Sprint, WorldCom and other U.S. direct access customers. For example, WorldCom has been able to obtain direct access for only about 12 percent of the circuits for which it has placed direct access orders with INTELSAT. Moreover, COMSAT has taken steps within INTELSAT to extend its virtual capacity monopoly many years into the future, including by extending INTELSAT capacity contracts far beyond the periods for which it has customer commitments.

⁸ ORBIT Act, § 2.

⁹ 47 U.S.C. § 765(a) (as added by § 3 of ORBIT Act).

In the ORBIT Act, Congress required the Commission to initiate this proceeding “to determine if users or providers of telecommunications services have sufficient opportunity to access INTELSAT space segment capacity directly from INTELSAT to meet their service or capacity requirements.”¹⁰ The ORBIT Act further provides that “[i]f the Commission determines that such opportunity to access [INTELSAT directly] does not exist, the Commission shall take appropriate action to facilitate such direct access”¹¹ In view of the clear evidence on the limitations of direct access to INTELSAT capacity, and mindful of the prohibition in the ORBIT Act on modification of COMSAT contracts,¹² Sprint and WorldCom propose that the Commission require COMSAT to make INTELSAT capacity available upon payment of a reasonable network management fee (which would not abrogate any COMSAT contract). The Commission should also take certain related actions to ensure the availability of INTELSAT capacity, as detailed below.

II. INTELSAT Provides a Unique Telecommunications Facility for Which There is No Substitute on Many Routes (¶ 21 of Portability NPRM)

The satellite services provided by INTELSAT are a unique resource in the international telecommunications market – providing connectivity for voice and data services to virtually every country on Earth. Notwithstanding the continued growth of international transmission capacity on fiber optic cable (which is now many times greater than INTELSAT capacity) and

¹⁰ 47 U.S.C. § 765(b) (as added by § 3 of ORBIT Act).

¹¹ Id. (emphasis added).

¹² 47 U.S.C. § 765(c) (as added by § 3 of ORBIT Act).

alternative satellite systems (e.g., PanAmSat), there is simply no viable substitute for INTELSAT capacity in a variety of important circumstances.

Sprint and WorldCom prefer to use fiber optic cable whenever it is a viable option, because of the lower cost and greater reliability of fiber.¹³ However, fiber optic cable cannot be used (or cannot economically be used) where:

- a country is not served by fiber optic cable at all (i.e., on numerous “thin routes” including those to many countries in Africa, Central America and Oceania);
- fiber optic capacity on a route is insufficient;
- fiber optic transmission involves complex or inefficient routing (e.g., Eastern Europe); or
- fiber optic transmission facilities do not reach the entire country (e.g., India, Russia and China).¹⁴

Similarly, alternative satellite systems often do not provide any meaningful competition to INTELSAT for voice services. The primary reason is that corresponding carriers in many countries – who are typically Signatory owners of INTELSAT and have made substantial investments for approximately three decades in INTELSAT earth stations – lack the incentive and financial ability to build capital-intensive ground infrastructure to access these relatively new systems. The world’s numerous small countries typically have only a few INTELSAT earth stations, and traffic volume is often insufficient to justify the cost of a new earth station to access

¹³ See Affidavit of George Clutter, ¶ 3 (June 23, 2000) (“WorldCom Aff.”) (attached as Exhibit 1); Affidavit of Vuong Nguyen, ¶ 3 (June 23, 2000) (“Sprint Aff.”) (attached as Exhibit 2).

¹⁴ See WorldCom Aff., ¶ 3.

a different system.¹⁵ Furthermore, many foreign carriers have long term leases with INTELSAT that effectively preclude them from moving to an alternative satellite system.¹⁶ In addition, other global satellite systems do not provide services equivalent to those of INTELSAT, which include a flexible range of end-user voice and data applications (such as International Digital Route (“IDR”) including IDR-TCM, INTELSAT Business Service (“IBS”), Time Division Multiple Access (“TDMA”) and Demand Assigned Multiple Access (“DAMA”)) and global coverage with common performance guarantees in all regions.¹⁷

In some cases, the INTELSAT system must be used because particular carriers or end-users choose to use INTELSAT exclusively. Foreign carriers often require use of INTELSAT capacity as part of a half-circuit correspondent relationship.¹⁸ For example, Sprint approached China Telecom about moving bilateral circuits exclusively to submarine cable facilities, but China Telecom would not do so because of a lack of terrestrial infrastructure within China.¹⁹ Furthermore, the INTELSAT system serves approximately 200 voice service closed user groups, which cannot be accessed over other facilities.²⁰

For all of these reasons, access to capacity on the INTELSAT system is critical to provision of international telecommunications services from the United States. Indeed,

¹⁵ See id., ¶ 4.

¹⁶ See Sprint Aff., ¶ 4.

¹⁷ See WorldCom Aff., ¶ 4; INTELSAT Tariff Manual.

¹⁸ See WorldCom Aff., ¶ 5.

¹⁹ See Sprint Aff., ¶ 3.

²⁰ See WorldCom Aff., ¶ 5.

notwithstanding the substantial cost advantage that fiber optic cable generally has over INTELSAT space segment, Sprint and WorldCom continue to use a wide variety of INTELSAT services, including IDR voice circuits, IBS data circuits, TDMA circuits, bulk capacity leases, and video services. Sprint currently uses a total of approximately 4400 INTELSAT circuits (64 kbps equivalent) and WorldCom uses well over 10,000 circuits. Sprint and WorldCom anticipate that the general need for INTELSAT capacity will grow steadily in the future.²¹

By implementing direct access, the Commission and Congress took a crucial step towards ensuring effective utilization of the INTELSAT system. In the Direct Access Order, the Commission predicted that “Level 3 direct access will afford opportunities for U.S. customers who utilize the INTELSAT system to realize greater efficiency, flexibility, control, and cost savings.”²² However, the Commission also noted substantial concerns regarding availability of INTELSAT capacity under direct access:

We would ... be concerned if Comsat control of INTELSAT space segment effectively denies U.S. carriers and users the benefits of direct access, or if Comsat moves to increase its control of INTELSAT capacity in order to deny availability of capacity to U.S. direct access users.²³

In fact, as discussed below, such concerns have become reality with the implementation of direct access. Under the mandate of the ORBIT Act, the Commission must take appropriate remedial action to ensure that the benefits of direct access are realized.

²¹ See WorldCom Aff., ¶ 2.

²² Direct Access Order, ¶ 22.

²³ Id., ¶ 128.

III. There Is Inadequate INTELSAT Capacity Available to U.S. Direct Access Customers Due to COMSAT Capacity Reservations and Other Conduct (¶¶ 21, 23 of Portability NPRM)

COMSAT capacity reservations and related COMSAT conduct have severely limited the amount of INTELSAT capacity available to U.S. direct access customers. In the Portability NPRM, the Commission notes that data gathered in the proceedings on the Direct Access Order indicated that the quantity of INTELSAT capacity available from the United States is extremely limited:

Only two [INTELSAT] satellites have an appreciable amount of uncommitted capacity available to and from North America. Of these, the available capacity on the 304.5E (55.5W) satellite is not useful over North America The capacity on the 330.5E (29.5W) satellite is of marginal use²⁴

Although direct access has been available for just over six months,²⁵ it is already very clear that capacity limitations like these are substantially reducing the usefulness of direct access. It is also clear that COMSAT is taking actions to preserve its virtual monopoly of INTELSAT capacity serving the U.S. well into the future.

Sprint and WorldCom have been able to obtain capacity for direct access in only a fraction of the cases in which they have sought it or considered obtaining it. WorldCom has to date submitted 311 direct access orders to INTELSAT, of which 138 remain pending.²⁶ The 172

²⁴ Portability NPRM, ¶ 18.

²⁵ See FCC News, Direct Access to INTELSAT Becomes Available in the United States (Dec. 6, 1999) (announcing availability of direct access on December 6, 1999).

²⁶ WorldCom Aff., ¶ 6. As discussed below, the slow processing of direct access orders is itself a significant barrier to direct access.

orders that have been processed cover 3888 circuits (64 kbps equivalent), and have resulted in direct access in only 12% of the orders.

Outcome	Circuits (64 kbps equivalent)	Orders
No U.S. direct access capacity available (renewed with COMSAT)	1772 (46 %)	72 (42 %)
No foreign match available (renewed with COMSAT)	1648 (42 %)	74 (43 %)
Direct access	468 (12 %)	26 (15 %)

Similarly, Sprint has a number of long term contracts with COMSAT that contain substantial termination penalties. Sprint would consider negotiating with COMSAT to pay the termination penalties in order to migrate some or all of the circuits covered by these contracts to INTELSAT under direct access. The unavailability of INTELSAT capacity (other than capacity controlled by COMSAT), however, means that Sprint cannot pursue such a direct access strategy.²⁷

These facts show that direct access is not generally available to U.S. carriers, and that such unavailability is due to capacity constraints. In most cases INTELSAT capacity (other than capacity controlled by COMSAT) is not available at all. In many other cases, capacity is effectively unavailable due to the absence of a foreign capacity “match,” as explained below. Indeed, this problem of capacity matching is only one of several capacity-related limitations on direct access that magnify the absolute limitations on INTELSAT capacity – all of which can and should be addressed in this proceeding.

²⁷ Sprint Aff., ¶ 5.

First, and most important, a carrier buying the U.S. half of an INTELSAT circuit must obtain a “match” from a foreign carrier buying the other half-circuit; and INTELSAT will not make capacity available until such a match is confirmed. Foreign carriers are often confused by the requirement of a “new” match in connection with direct access, because direct access does not change network architecture – i.e., foreign carriers have always corresponded directly with U.S. carriers like WorldCom and Sprint notwithstanding the middleman role of COMSAT. Accordingly, foreign carriers are often unwilling to offer matches – because, among other reasons, they fear that the process of “terminating” existing capacity and matching “new” capacity will risk the loss of scarce existing capacity, and because the decision to offer a capacity match can require high-level, time-consuming approvals in foreign carrier organizations.²⁸ Recognizing this problem, INTELSAT on January 3, 2000 proposed to treat the transfer of the foreign half-circuit for direct access as a frequency change (a very common occurrence in INTELSAT operations) rather than a capacity match; and WorldCom accepted this approach. However, INTELSAT withdrew its proposal less than three hours later in response to pressure from COMSAT.²⁹ This anticompetitive behavior by COMSAT is unacceptable, particularly because the failure of a U.S. carrier to obtain a foreign capacity match effectively means that INTELSAT capacity is unavailable.

Second, COMSAT is able to maintain its control over INTELSAT capacity through “rolling” extensions of its long-term capacity contracts with INTELSAT.³⁰ That is, COMSAT is

²⁸ See WorldCom Aff., ¶ 9.

²⁹ See id.; E-mails from Randy Mellon (INTELSAT) (attached as Exhibit 3).

³⁰ See WorldCom Aff., ¶ 11.

able to repeatedly push back the expiration date of such contracts, before they expire, to as far as fifteen years in the future – so that the capacity covered by the contracts may never become available to direct access customers. This sort of capacity warehousing improperly extends COMSAT's monopoly control over the U.S. market for INTELSAT services, and makes it difficult or impossible for U.S. carriers to develop long-term international facilities plans that include use of INTELSAT direct access capacity.

Third, INTELSAT has processed direct access orders very slowly, apparently due in large part to the actions of COMSAT within INTELSAT.³¹ Such failure to timely act on a direct access order can amount to effective denial of direct access, because carriers who cannot obtain direct access on a route before a contract with COMSAT expires have no real choice but to renew with COMSAT. Moreover, COMSAT's pricing effectively requires long-term renewals, because COMSAT mark-ups on short-term capacity contracts are prohibitively high.³²

Fourth, COMSAT and other INTELSAT Signatories receive information on future satellite deployment schedules, capacity "specials," and capacity availability that is not provided to Level 3 direct access customers. Much of this information is available to Signatories via the INTELSAT Business Network ("IBN") web site and INTELSAT Board of Governors meetings. Level 3 direct access customers have access to a version of IBN that provides more limited

³¹ See WorldCom Aff., ¶ 6.

³² See Direct Access Order, Table D (showing COMSAT mark-ups over the INTELSAT Utilization Charge for various service terms).

information.³³ Such advantages in access to information help COMSAT preserve and extend its virtual monopoly over INTELSAT capacity available from the United States.³⁴

Fifth, COMSAT has access to information that Sprint, WorldCom and other carriers submit to INTELSAT regarding their direct access requirements. COMSAT can use this information to exploit or interfere with the business opportunities that generated those requirements. For example, in recent instances involving service to Malaysia and Brazil, COMSAT was able to use rights of first refusal in order to obtain INTELSAT lease capacity for which WorldCom was also competing, and then to sell this capacity to the same customers to which WorldCom intended to sell the capacity. WorldCom believes that COMSAT obtained information on the existence of these customer opportunities through its involvement in the direct access process.³⁵ Decisive action is needed to prevent such grossly anticompetitive behavior by COMSAT.

For all of the above reasons, there is a strong evidentiary basis for the Commission to conclude that there is a scarcity of INTELSAT capacity available from the United States because of COMSAT capacity reservations, that COMSAT is otherwise abusing the INTELSAT capacity ordering process, and that the Commission should “take appropriate action to facilitate ... direct access” as mandated by the ORBIT Act.³⁶

³³ See WorldCom Aff., ¶ 10.

³⁴ See Portability NPRM, ¶ 19-20 (noting that capacity on future INTELSAT satellites is a key issue in this proceeding).

³⁵ See WorldCom Aff., ¶ 12.

³⁶ 47 U.S.C. § 765(b) (as added by § 3 of ORBIT Act).

IV. The Commission Has Authority Under the ORBIT Act to Require COMSAT to Make INTELSAT Capacity Available, Subject to a Network Management Fee to Cover COMSAT's Reasonable Costs (§§ 24-26, 28 of Portability NPRM)

The Commission has clear authority under the ORBIT Act – indeed, it has an obligation – to remedy capacity-related constraints on direct access. The Act provides explicitly that “[i]f the Commission determines that such opportunity to access [INTELSAT directly] does not exist, the Commission shall take appropriate action to facilitate such direct access pursuant to its authority under this Act and the Communications Act of 1934.”³⁷ The Commission does not have the discretion to ignore this mandatory statutory obligation.

Sprint and WorldCom submit that the most appropriate way for the Commission to remedy the constraints on INTELSAT capacity is to adopt the network management fee (“NMF”) approach originally proposed by the Satellite Users Coalition (of which Sprint and WorldCom are members) and repeated by the Commission in the Portability NPRM.³⁸ Specifically, upon expiration of an existing contract for INTELSAT capacity between COMSAT and a carrier or other end user that is an approved direct access customer of INTELSAT, the user should have the option of continuing to purchase INTELSAT service through COMSAT at the underlying INTELSAT Utilization Charge, including any volume discounts available for such service, plus an NMF of two percent.³⁹ The user should be permitted to purchase under this

³⁷ 47 U.S.C. § 765(b) (as added by § 3 of ORBIT Act) (emphasis added).

³⁸ Portability NPRM, ¶ 26.

³⁹ For example, Sprint manages private lines for a major carrier at an arm’s length fee for monitoring and maintenance functions of 2-4 percent of the monthly recurring charges for the circuits. An NMF at the lower end of this range is appropriate in the present case, because COMSAT has no maintenance responsibilities (or any other direct involvement with facilities) with respect to INTELSAT circuits.

arrangement for any service term that is consistent with the underlying COMSAT capacity contracts with INTELSAT. Furthermore, COMSAT should be required to give a U.S. customer purchasing under such an arrangement a right of first refusal to purchase the capacity directly from INTELSAT (1) upon expiration of COMSAT's contract with INTELSAT covering the capacity and (2) before any extension of such contract. This approach has the benefit of conferring most of the benefits of Level 3 direct access on end users, while compensating COMSAT for its legitimate costs and leaving COMSAT contracts with INTELSAT entirely intact.⁴⁰

In addition, to address the other capacity-related concerns with direct access described above, the Commission should:

- require COMSAT to inform INTELSAT that it does not oppose treating transfers of foreign half-circuits in connection with direct access as frequency changes;
- prohibit COMSAT from delaying the processing of direct access orders to INTELSAT;
- require COMSAT to make capacity information received from INTELSAT available to approved U.S. direct access customers within one business day of receipt of such information (to minimize burden on COMSAT, the Commission should instruct COMSAT to work with INTELSAT on ways that such information can be provided directly by INTELSAT to Level 3 direct access customers);
- require COMSAT twice per year to provide to the Commission and to approved Level 3 direct access customers (subject to a reasonable non-disclosure agreement) a summary of its capacity commitments for the following five years for each type of INTELSAT circuit, and the percentage of that capacity for each type of circuit for each year that is committed under customer contracts (in order for the Commission and

⁴⁰ See 47 U.S.C. § 765(c) (as added by § 3 of ORBIT Act) ("Nothing in this section shall be construed to permit the abrogation or modification of any contract.").

direct access customers to be able to detect warehousing of capacity by COMSAT); and

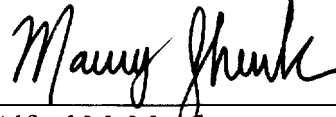
- prohibit COMSAT from using information received from INTELSAT regarding direct access requests for any purpose relating to the sale of INTELSAT services by COMSAT.

V. Conclusion

For the reasons set out above, the Commission should follow the mandate of the ORBIT Act and implement portability of INTELSAT capacity in the manner described above.⁴¹

Respectfully submitted,

By:



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Company LP and WorldCom, Inc.

Dated: June 23, 2000

⁴¹ The Commission has also requested comment on the effect of INTELSAT privatization on access to INTELSAT capacity. See *Portability NPRM*, ¶ 17. Sprint and WorldCom agree with the Commission that the benefits of direct access should not be lost through privatization, and that COMSAT or its successor should not be permitted to reassume its monopoly on access to the INTELSAT system after privatization. *Id.*, ¶ 16. We also fully support the Commission's expectation that U.S. service providers shall have the same distribution rights and opportunities as former INTELSAT Signatories or alternatively shall be able to take service directly from INTELSAT. *Id.*, ¶ 17. Once INTELSAT has disclosed its proposed corporate structure and rules of operation as a privatized entity, Sprint and WorldCom will comment in greater detail on how such restructuring will affect their ability to obtain sufficient INTELSAT capacity.

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IB Docket No. 00-91

To: The Commission

AFFIDAVIT OF GEORGE CLUTTER

George Clutter states as follows:

1. I am Senior Manager for International Facilities Implementation at WorldCom, Inc. ("WorldCom"). In this position, I have primary responsibility at WorldCom for purchase of communications channels on the INTELSAT satellite system.
2. WorldCom currently uses INTELSAT capacity that is equivalent to well over 10,000 64 kbps circuits. WorldCom expects that its requirements for INTELSAT capacity will grow by approximately 5-10 percent per year over the next five years.
3. WorldCom uses fiber optic cable instead of satellite capacity whenever it can, because fiber optic cable is substantially less expensive and generally offers higher transmission quality than satellite. However, we have no choice but to use INTELSAT capacity where fiber optic cable cannot meet our international telecommunications requirements. This includes cases where (1) a country is not served by fiber optic cable at all (like many countries in Africa, Central America and Oceania); (2) fiber optic transmission involves complex or inefficient

routing (e.g., Eastern Europe); or (3) fiber optic transmission facilities do not reach the entire country (e.g., India, Russia, China).

4. Satellite systems other than INTELSAT (e.g., PanAmSat) also do not provide a substitute for INTELSAT capacity for voice traffic. The main reason is that carriers in many countries own INTELSAT earth stations, but have not built earth stations to access alternative satellite systems. Many small countries have only a few satellite earth stations (which almost always operate with the INTELSAT system), and traffic growth in these countries is often insufficient to justify the cost of a new earth station. In addition, other systems cannot match INTELSAT's variety of end-user voice and data applications, and global coverage with common performance guarantees in all regions.

5. Other circumstances also require us to use INTELSAT facilities. Foreign carriers often require use of INTELSAT capacity as part of a half-circuit correspondent relationship. Furthermore, the INTELSAT system serves approximately 200 voice service closed user groups, which cannot be accessed over other facilities.

6. Although WorldCom is an approved Level 3 direct access customer of INTELSAT, we have had very little success so far in filling our INTELSAT capacity needs through direct access. WorldCom has to date submitted 311 direct access orders to INTELSAT, of which 139 remain pending. INTELSAT has processed WorldCom's orders quite slowly, apparently due in large part to COMSAT Corporation ("COMSAT") involvement in the direct access process within INTELSAT.

7. The 172 WorldCom direct access orders that INTELSAT has processed cover 3888 circuits, and have been handled as set out in the chart below.

Outcome	Circuits (64 kbps equivalent)	Orders
No U.S. capacity available (renewed with COMSAT)	1772	72
No foreign match available (renewed with COMSAT)	1648	74
Direct access	468	26

8. The low success rate in WorldCom's direct access orders has meant that we have so far realized only a fraction of the cost savings and other efficiencies that we expected to see from direct access. COMSAT appears to have used any means available to it to frustrate our ability to obtain direct access. In addition to doing what it can to lock up available capacity, COMSAT has taken a variety of other actions that impede direct access, the most important of which are described below.

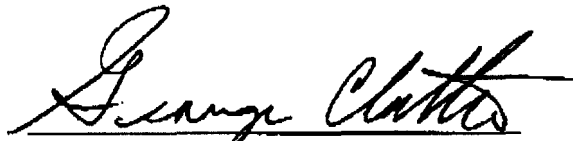
9. An INTELSAT capacity order by a U.S. carrier must have a foreign carrier "match", and INTELSAT generally will not confirm the availability of capacity until a match has been obtained. This requirement has generated substantial confusion among foreign carriers, who. Foreign carriers often cannot understand the need to match existing capacity. They are often unwilling to offer matches for various reasons, including that they fear that the process of "terminating" existing capacity and matching "new" capacity will risk the loss of scarce existing capacity, and that they require high-level, time-consuming corporate approvals to offer a match. INTELSAT on January 3, 2000 proposed to help by treating transfers of foreign half-circuits as frequency changes (a very common occurrence in INTELSAT operations) rather than a capacity match; and WorldCom accepted this approach. However, INTELSAT withdrew its offer after less than three hours in response to pressure from COMSAT.

10. INTELSAT Signatories receive information on future satellite deployment schedules, capacity "specials", and capacity availability, much of which is provided via the

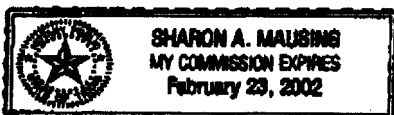
INTELSAT Business Network ("IBN") web site and at INTELSAT Board of Governors meetings. However, Level 3 direct access customers have access to a version of IBN that provides more limited information.

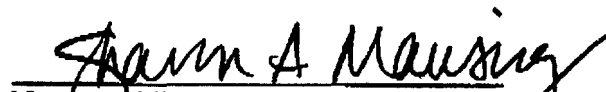
11. WorldCom has learned that INTELSAT permits COMSAT to extend its long-term capacity contracts with INTELSAT on a "rolling" basis. That is, COMSAT is able to repeatedly push back the expiration date of such contracts before they expire, apparently on the assumption that these tactics will allow it to continue to lock up the business of U.S. carriers. This makes it very difficult for us to develop our long-term international facilities plans, in which we would like to include future expansion of direct access.

12. In recent cases involving service to Malaysia and Brazil, COMSAT was able to use rights of first refusal in order to obtain INTELSAT lease capacity for which WorldCom was also competing, and then to sell this capacity to the same customers to which WorldCom intended to sell the capacity. WorldCom believes that COMSAT obtained information on the existence of these customer opportunities through its involvement in the direct access process. It is certainly not fair for COMSAT to be able to take our business using information obtained in the direct access process.


George Clutter

Subscribed and sworn to before me this 23 day of June 2000.




Notary Public

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To: The Commission

AFFIDAVIT OF VUONG NGUYEN

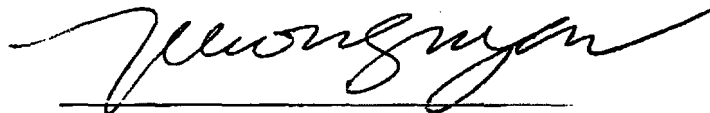
Vuong Nguyen states as follows:

1. I am Regional Manager, International Network Services, at Sprint Communications Company L.P. ("Sprint"). In this position, I have responsibility at Sprint relating to purchase of communications channels on the INTELSAT satellite system.
2. Sprint currently uses INTELSAT capacity that is equivalent to approximately 4400 64 kbps equivalent circuits.
3. Sprint uses fiber optic cable instead of satellite capacity whenever it can, but we still must use INTELSAT capacity where fiber optic cable cannot meet our requirements. For example, Sprint approached China Telecom about moving bilateral circuits exclusively to submarine cable facilities, but China Telecom would not do so because of a lack of terrestrial infrastructure within China.
4. Foreign carriers are also generally unwilling or unable to exchange traffic using satellite systems other than INTELSAT. For example, many foreign carriers have long term

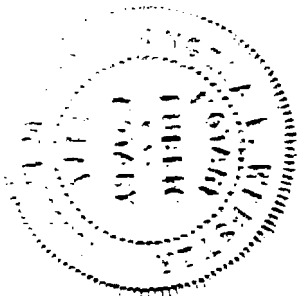
leases with INTELSAT that effectively preclude them from moving to a competitive satellite carrier.


5. Sprint has a number of long term contracts with COMSAT for INTELSAT capacity that contain substantial termination penalties. Sprint would consider negotiating with Comsat to pay the termination penalties provided in these contracts in order to migrate some or all of the circuits covered by these contracts to INTELSAT under direct access. The unavailability of INTELSAT capacity means that Sprint cannot even consider such a strategy.

June 23, 2000


Vuong Nguyen

Subscribed and sworn to before me this 23rd day of June 2000.




Notary Public

ANGELA E WEBSTER
NOTARY PUBLIC STATE OF MISSOURI
JACKSON COUNTY
MY COMMISSION EXP OCT 15,2000

From: randy.mellon@intelsat.int [mailto:randy.mellon@intelsat.int]
Sent: Monday, January 03, 2000 3:41 PM
To: joyce.wheeler@comsat.com; J.Few@wcom.com; britt.lewis@intelsat.int;
bea.whittington@comsat.com; jean-robert.barallon@intelsat.int;
andre.daoust@intelsat.int; joseph.jankowski@intelsat.int
Cc: kim.baumgartner@comsat.com
Subject: RE: MCI DIRECT ACCESS SERVICES

After discussion with the North American sales group, please disregard this

message concerning the transfer of services from COMSAT.

Randy Mellon

202-944-6937

email: randy.mellon@intelsat.int

> -----Original Message-----

> From: Mellon, Randy R

> Sent: Monday, January 03, 2000 1:28 PM

> To: 'joyce.wheeler@comsat.com'; 'J.Few@wcom.com'; Lewis

> Jr., P Britt; 'bea.whittington@comsat.com'; Barallon,

> Jean-Robert; D'Aoust, Andre; Jankowski, Joseph A

> Cc: Mellon, Randy R

> Subject: MCI DIRECT ACCESS SERVICES

>

> For the past two weeks, I have been receiving orders from MCI

> for new services, which are

> actually existing services between COMSAT and INTELSAT.

>

> May I suggest that in transferring orders from COMSAT to

> direct access with INTELSAT, we do

> the following:

>

> 1) Existing orders that MCI has with COMSAT, which they wish

> to transfer, send in a cancellation

> message to COMSAT.

>

> 2) COMSAT will then cancel the service (with INTELSAT only)

> in order to cease billing. The foreign

> end need not be involved with this. This could even be

> done via email

>

> 3) MCI sends their order directly to INTELSAT for direct

> access. After approval from COMSAT legal,

> billing will commence one day after the service is

> cancelled with COMSAT. INTELSAT will handle this

> as strictly a customer change.

>

> This seems to be the easiest way to handle these services.
> If the capacity is to remain the same, no
> coordination needs to be done with the other side, and no
> SSOG messages would have to be sent.
> In cases where services are assigned within COMSAT leases, of
> course, new capacity would have to be allocated.
>
> Joyce, I realize that you would have to coordinate any
> overcommitments that you have with us, but
> I think this would pretty much work out.
>
> Please let me know if this arrangement would be acceptable to
> both COMSAT and MCI.
>
> I am trying to make this as easy as possible for all of us. Tha
nks.
>
>
>
>
> Randy Mellon
> 202-944-6937
> email: randy.mellon@intelsat.int
>

CERTIFICATE OF SERVICE

I hereby certify that on this 23rd day of June, 2000, a true and correct copy of the foregoing COMMENTS OF SPRINT COMMUNICATIONS COMPANY, L.P. AND WORLDCOM, INC. was served via hand-delivery (except where indicated) upon each of the following:

Don Abelson
Chief, International Bureau
Federal Communications Commission
The Portals – Rm. 6-B722
445 12th Street, S.W.
Washington, D.C. 20554

Douglas Webbink
Chief Economist, International Bureau
Federal Communications Commission
The Portals – Rm. 6-C730
445 12th Street, S.W.
Washington, D.C. 20554

Ari Fitzgerald
Deputy Bureau Chief, International Bureau
Federal Communications Commission
The Portals – Rm. 8-B201
445 12th Street, S.W.
Washington, D.C. 20554

*Lawrence J. Lafaro
Teresa Marrero
AT&T Corporation
295 N. Maple Avenue
Basking Ridge, NJ 07920

Peter Pappas
Associate Bureau Chief, International Bureau
Federal Communications Commission
The Portals – Rm. 6-C716
445 12th Street, S.W.
Washington, D.C. 20554

*Warren Y. Zeger
Howard D. Polsky
Keith H. Fagan
COMSAT Corporation
6560 Rock Spring Drive
Bethesda, Maryland 20817

James Ball
Associate Bureau Chief, International Bureau
Federal Communications Commission
The Portals – Rm. 6-C749
445 12th Street, S.W.
Washington, D.C. 20554

Michael McCain
Federal Communications Commission
The Portals – Rm. 6-B510
445 12th Street, S.W.
Washington, D.C. 20554

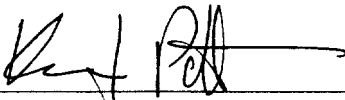
Cathy Hsu
Federal Communications Commission
The Portals – Rm. 6-C804
445 12th Street, S.W.
Washington, D.C. 20554

*Richard E. Wiley
Lawrence W. Secrest III
Rosemary C. Harold
Martha E. Heller
Wiley, Rein & Fielding
1776 K Street, N.W.
Washington, D.C. 20006

Kathleen A. Campbell
International Bureau
Federal Communications Commission
445 12th Street, S.W.
Washington, D.C. 20554

International Transcription Services, Inc.
445 12th Street, S.W.
Washington, D.C. 20554

*Delivered by first-class mail, postage prepaid



Karen J. Pettapiece

Before the
Federal Communications Commission
Washington, D.C. 20554

RECEIVED

JUN 23 2000

FEDERAL COMMUNICATIONS COMMISSION
OFFICE OF THE SECRETARY

In the Matter of

Inquiry Regarding Software Defined Radios

ET Docket 00-47

COMMENTS OF THE PUBLIC SAFETY
NATIONAL COORDINATION COMMITTEE

The Public Safety National Coordination Committee, a Federal Advisory Committee established by the Commission¹ pursuant to the Federal Advisory Committee Act, 5 U.S.C. App. 2 hereby files its attached comments in the captioned Notice of Inquiry.

Respectfully submitted,

Kathleen M.H. Wallman /mhw

Kathleen M.H. Wallman, Chair
Public Safety National Coordination Committee

June 23, 2000

No. of Copies rec'd 0+4
List A B C D E

¹ Development of Operational, Technical and Spectrum Requirements for Meeting Federal, State and Local Public Safety Agency Communications Requirements through the Year 2010, *First Report and Order and Third Notice of Proposed Rulemaking*, WT Docket No. 96-86, 14 FCC Rcd 152 (1998).

The National Coordination Committee (NCC) offers the following comments relative to the Federal Communications Commission Notice of Inquiry in ET Docket 00-47.

The NCC is intrigued by the possibilities that Software Defined Radios might offer for enhancing interoperability amongst public safety agencies. Public Safety agencies currently operate in eleven separate frequency bands using a variety of operating modes. Few radios offered in today's marketplace are capable of operating in more than one of these bands/operating modes and no radio is capable of operating in all of them. Thus, public safety agencies needing to interoperate with other agencies are required to either equip their field personnel with multiple radios or establish an alternative means of providing for interoperability. A Software Defined Radio may allow these same agencies to provide full interoperability using only one radio thereby simplifying operation for the field officer and potentially reducing the overall cost (purchasing one radio, even if slightly more expensive, is cheaper than purchasing several different radios).

While the versatility of a Software Defined Radio has these intriguing possibilities of enhancing interoperability, it also raises some concerns about the potential for misuse. The extent to which an end-user may be able to program a radio to operate on any frequency and in any mode increases the ability of that user to program the radio to operate in an unauthorized manner. The NCC is concerned that such capability may further increase interference problems and/or unauthorized access to public safety systems. These problems are already being experienced on critical public safety radio systems.

To help alleviate these concerns, the NCC recommends that the Commission include the following restrictions upon the implementation of Software Defined Radios.

1. That programming of the radio not be accessible to the end-user but rather be restricted to appropriately licensed technicians.
2. That the program entered into the SDR by a licensed technician include a registration tag that uniquely identifies the technician entering the program.
3. That technicians be held accountable for the programs they enter into the radio to include certification that the program enables only those frequencies and those modes of operation for which the end-user is authorized to operate. Failure to comply with this requirement should subject the technician to an appropriate penalty. This penalty should include the ultimate loss of license and forfeiture of all programming equipment for repeated or particularly egregious acts of inappropriate programming.
4. That the Commission implement a program to both license technicians and enforce these programming requirements.